

Project Factsheet for: Snowpack Flood Potential

Date Last Updated: 08/15/2007 10:14

Project Location Information

Location: Throughout the Rock Island District

River Basin(s): Des Moines / Skunk, Illinois, Iowa / Cedar, Mississippi, Rock

State(s): IA, IL, MN, MO, WI

Congressional District(s): WI-6, WI-5, WI-3, WI-2, WI-1, MO-9, MO-6, MN-7, MN-1, IL-3, IL-2, IL-19, IL-18, IL-17, IL-16, IL-15, IL-14, IL-13, IL-11, IA-5, IA-4, IA-3, IA-2, IA-1

Status

Information regarding snowpack flood potential for the spring of 2008 will not be available until February 2008.

Description

Terminology

- Minor flooding: A general term indicating minimal or no property damage, but possibly some public inconvenience.
- Moderate flooding: The inundation of secondary roads; transfer to higher elevation necessary to save property; some evacuation may be required.
- Major flooding: A general term including extensive inundation and property damage (usually characterized by the evacuation of people and livestock and the closure of both primary and secondary roads).

The risk for snowmelt flooding is determined by several factors, including: soil moisture, soil frost, snow water equivalent, river ice, base flows, future precipitation, and rate of melt. A gradual or intermittent melt with below normal precipitation would decrease the flood risk. Above normal precipitation, rapid snowmelt, and ice jams would increase the flood threat. On average, the month with the greatest snowfall in the Upper Midwest is March.

"These projections of river stages and reservoir levels are based on current observed states of streamflow, soil moisture, and snow pack, coupled with future precipitation and temperature patterns and anticipated operational hydrologic changes such as reservoir releases and canal diversions. "Outlooks" are provided for long-range (weeks to months) projections based on climatological patterns of precipitation and temperature. "Forecasts" are provided for short-term (days) projections based on future forecasted patterns of precipitation and temperature. The uncertainty of these products varies from season to season and site to site. In recent years, outlook crests have been above the observed crest about as often as they have been below the observed crest. The uncertainty of forecasts tends to be less than the uncertainty of outlooks due to their shorter lead time. Users of these products are encouraged to contact their nearest National Weather Service Forecast Office for continued updates of meteorological conditions which can have significant impacts on flood planning and flood fighting activities."

Authority

SI - Special Interest --

Project Manager Information

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